

SQ Sequence 223 AA;

Query Match 58.0%; Score 792.5; DB 22; Length 223;  
 Best Local Similarity 66.8%; Pred. No. 1e-68;  
 Matches 147; Conservative 0; Mismatches 0; Indels 73; Gaps 1;

QY 1 MLWRLIYQWLLALFFLPFCLODEYME-----28  
 DB 1 MLWRLIYQWLLALFFLPFCLODEYME-----28  
 QY 29 -----SPOTGLPPDCSKCHGDY 47  
 DB 61 SHPKTGVVNTSTDLKSLRPDELPHPEVDDLAQITTFWGSQSPOTGLPPDCSKCHGDY 120  
 QY 48 SFGYQYQPPGPPGPGIPGNHNGNNGATGHEGAKGDKGDLGPRGERGQHPKGBK 107  
 DB 121 SFGYQYQPPGPPGPGIPGNHNGNNGATGHEGAKGDKGDLGPRGERGQHPKGBK 180  
 QY 108 GYGPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147  
 DB 181 GYGPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNF 220

RESULT 11  
 AAY11485  
 ID AAY11485 standard; Protein; 128 AA.

AC AAY11485;  
 XX  
 DT 21-JUN-1999 (first entry)  
 XX  
 DE Human 5' EST secreted protein SEQ ID NO 307.  
 XX  
 KW Human; secreted protein; EST; expressed sequence tag; diagnosis;  
 KW forensic; gene therapy; chromosome mapping; signal peptide;  
 KW upstream regulatory sequence; cytokine activity; cell proliferation;  
 KW differentiation; haematopoiesis regulation; tissue growth regulation;  
 KW reproductive hormone regulation; chemotactic; chemokinetic; haemostatic;  
 KW thrombolytic; anti-inflammatory; tumour inhibition.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9906551-A2.  
 XX  
 PD 11-FEB-1999.  
 XX  
 PF 31-JUL-1998; 98WO-IB01235.  
 XX  
 PR 01-AUG-1997; 97US-0905133.  
 XX  
 PA (GEST ) GENSET.  
 XX  
 PI Duclert A, Dumas Milne Edwards J, Lacroix B;  
 XX  
 DR WPI; 1999-153781/13.  
 DR N-PSDB; AAX39551.  
 XX  
 PT New nucleic acids encoding human secreted - proteins obtained from  
 PT cDNA libraries prepared from substantia nigra, cerebellum, surrenals  
 XX and fetal brain tissue  
 PS Claim 34; Page 402-403; 434pp; English.  
 XX  
 CC AAX39440 to AAX39597 represent 5' expressed sequence tags (ESTs) for  
 CC human secreted proteins, and encode the proteins given in AAY11374 to  
 CC AAY11531, respectively. The proteins given represent the signal peptide  
 CC and an N-terminal fragment of a secreted protein. The nucleic acid  
 CC sequences can also be used for producing secreted human gene products. They  
 CC can also be used to develop products for diagnosis and therapy. The  
 CC proteins obtained may have cytokine activity, cell  
 CC proliferation/differentiation activity, haematopoiesis regulating  
 CC activity, tissue growth regulating activity, reproductive hormone  
 CC regulating activity, chemotactic/ chemokinetic activity, haemostatic and

CC thrombolytic activity, receptor/ ligand activity, anti-inflammatory  
 CC activity, tumour inhibition activity or other activities. The products  
 CC can be used in forensic, gene therapy and chromosome mapping procedures.  
 CC The sequences can also be used for obtaining corresponding promoter  
 CC sequences. The nucleic acids encoding the signal peptide can be used for  
 CC directing extracellular secretion of a polypeptide or the insertion of a  
 CC polypeptide into a membrane, or importing a polypeptide into a cell.

SQ Sequence 128 AA;

Query Match 52.7%; Score 721; DB 20; Length 128;  
 Best Local Similarity 100.0%; Pred. No. 4.2e-62;  
 Matches 124; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLWRLIYQWLLALFFLPFCLODEYME-----60  
 DB 1 MLWRLIYQWLLALFFLPFCLODEYME-----60  
 QY 61 PPGIPGNHNGNNGATGHEGAKGDKGDLGPRGERGQHPKGBK 120  
 DB 61 PPGIPGNHNGNNGATGHEGAKGDKGDLGPRGERGQHPKGBK 120  
 QY 121 MASL 124  
 DB 121 MASL 124

RESULT 12  
 AAM40074  
 ID AAM40074 standard; Protein; 126 AA.

AC AAM40074;  
 XX  
 DT 22-OCT-2001 (first entry)  
 XX  
 DE Human polypeptide SEQ ID NO 3219.  
 XX  
 KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;  
 KW peripheral nervous system; neuropathy; central nervous system; CNS;  
 KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;  
 KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;  
 KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;  
 XX leukaemia.  
 OS Homo sapiens.  
 XX  
 PN WO200153312-A1.  
 XX  
 PD 26-JUL-2001.  
 XX  
 PF 26-DEC-2000; 2000WO-US34263.  
 XX  
 PR 21-JAN-2000; 2000US-0488725.  
 PR 25-APR-2000; 2000US-0552317.  
 PR 09-JUL-2000; 2000US-0598042.  
 PR 19-JUL-2000; 2000US-0620312.  
 PR 03-AUG-2000; 2000US-0653450.  
 PR 14-SEP-2000; 2000US-0662191.  
 PR 19-OCT-2000; 2000US-0693036.  
 PR 29-NOV-2000; 2000US-0727344.  
 XX  
 PA (HYSE-) HYSEQ INC.  
 XX  
 PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;  
 PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;  
 PI Zhao QA, Zhou P, Goodrich R, Drmanac RT;  
 XX  
 DR WPI; 2001-442253/47.  
 DR N-PSDB; AAI59230.  
 XX  
 PT Novel nucleic acids and polypeptides, useful for treating disorders.  
 PT such as central nervous system injuries.

GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: January 13, 2003, 10:42:48 ; Search time 15 Seconds  
(without alignments)  
482.536 Million cell updates/sec

Title: US-09-931-836-2  
Perfect score: 1367  
Sequence: 1 MLNRQLYVWLLALFLFPFC.....LHGDHQRSTFAGFLPETK 246

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/1/iaa/5A.COMB.pcp.\*  
2: /cgn2\_6/ptodata/1/iaa/5B.COMB.pcp.\*  
3: /cgn2\_6/ptodata/1/iaa/6A.COMB.pcp.\*  
4: /cgn2\_6/ptodata/1/iaa/6B.COMB.pcp.\*  
5: /cgn2\_6/ptodata/1/iaa/PCTUS.COMB.pcp.\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pcp.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description       |
|------------|-------|-------------|--------|-------|-------------------|
| 1          | 582   | 42.6        | 105    | 4     | US-09-188-930-147 |
| 2          | 582   | 42.6        | 105    | 4     | US-09-188-930-280 |
| 3          | 316   | 23.1        | 294    | 4     | US-09-188-930-294 |
| 4          | 294   | 21.5        | 247    | 2     | US-08-463-911-2   |
| 5          | 293.5 | 21.5        | 231    | 4     | US-09-530-423-2   |
| 6          | 293.5 | 21.5        | 244    | 2     | US-08-463-911-7   |
| 7          | 293.5 | 21.5        | 244    | 4     | US-09-140-804-3   |
| 8          | 293.5 | 21.5        | 244    | 4     | US-09-336-536-20  |
| 9          | 293.5 | 21.5        | 244    | 4     | US-09-530-423-1   |
| 10         | 287   | 21.0        | 247    | 4     | US-09-140-804-8   |
| 11         | 287   | 21.0        | 247    | 4     | US-09-118-408-3   |
| 12         | 287   | 21.0        | 247    | 4     | US-09-506-855-3   |
| 13         | 274   | 20.0        | 246    | 2     | US-08-463-911-4   |
| 14         | 273   | 20.0        | 746    | 4     | US-09-370-838-185 |
| 15         | 264.5 | 19.3        | 228    | 4     | US-09-336-536-4   |
| 16         | 264.5 | 19.3        | 243    | 4     | US-09-140-804-2   |
| 17         | 264.5 | 19.3        | 243    | 4     | US-09-336-536-3   |
| 18         | 254.5 | 18.6        | 243    | 4     | US-09-336-536-10  |
| 19         | 252.5 | 18.5        | 228    | 4     | US-09-336-536-11  |
| 20         | 252.5 | 18.5        | 243    | 4     | US-09-188-930-295 |
| 21         | 237.5 | 17.4        | 281    | 4     | US-09-118-408-44  |
| 22         | 237.5 | 17.4        | 281    | 4     | US-09-506-855-44  |
| 23         | 226   | 16.5        | 281    | 4     | US-09-118-408-2   |
| 24         | 226   | 16.5        | 281    | 4     | US-09-506-855-2   |
| 25         | 226   | 16.5        | 423    | 1     | US-08-383-744-2   |
| 26         | 226   | 16.5        | 423    | 2     | US-08-999-336-2   |
| 27         | 226   | 16.5        | 423    | 5     | PCT-US96-01427-2  |

|    |       |      |     |   |                   |                    |
|----|-------|------|-----|---|-------------------|--------------------|
| 28 | 219   | 16.0 | 245 | 4 | US-09-140-804-4   | Sequence 4, Appli  |
| 29 | 202   | 14.8 | 215 | 4 | US-09-140-804-5   | Sequence 5, Appli  |
| 30 | 200.5 | 14.7 | 198 | 4 | US-09-188-930-138 | Sequence 138, App  |
| 31 | 196   | 14.3 | 222 | 4 | US-09-140-804-7   | Sequence 7, Appli  |
| 32 | 194   | 14.2 | 185 | 2 | US-08-463-911-3   | Sequence 3, Appli  |
| 33 | 192   | 14.0 | 623 | 4 | US-09-029-348-3   | Sequence 3, Appli  |
| 34 | 192   | 14.0 | 626 | 4 | US-09-029-348-2   | Sequence 2, Appli  |
| 35 | 186   | 13.6 | 236 | 4 | US-09-140-804-6   | Sequence 6, Appli  |
| 36 | 185   | 13.5 | 357 | 1 | US-07-609-716-66  | Sequence 66, Appli |
| 37 | 185   | 13.5 | 357 | 1 | US-08-642-255-33  | Sequence 33, Appli |
| 38 | 185   | 13.5 | 357 | 1 | US-08-475-411A-66 | Sequence 66, Appli |
| 39 | 185   | 13.5 | 357 | 1 | US-08-478-029A-66 | Sequence 66, Appli |
| 40 | 184.5 | 13.5 | 684 | 1 | US-08-555-669-12  | Sequence 12, Appli |
| 41 | 184.5 | 13.5 | 684 | 3 | US-09-073-663-12  | Sequence 12, Appli |
| 42 | 183.5 | 13.4 | 532 | 1 | US-08-494-168-9   | Sequence 9, Appli  |
| 43 | 183   | 13.4 | 489 | 2 | US-08-794-795-7   | Sequence 7, Appli  |
| 44 | 183   | 13.4 | 489 | 4 | US-09-249-200-7   | Sequence 7, Appli  |
| 45 | 183   | 13.4 | 518 | 1 | US-08-392-367B-2  | Sequence 2, Appli  |

ALIGNMENTS

RESULT 1  
US-09-188-930-147  
; Sequence 147, Application US/09188930A  
; Patent No. 6150502  
; GENERAL INFORMATION:  
; APPLICANT: Watson, James D.  
; APPLICANT: Strachan, Lorna  
; APPLICANT: Sleeman, Matthew  
; APPLICANT: Onrust, Rene  
; APPLICANT: Murison, James Greg  
; TITLE OF INVENTION: Compositions Isolated From Skin Cells  
; FILE REFERENCE: 11000.1011c1  
; CURRENT FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 348  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 147  
; LENGTH: 105  
; TYPE: PRT  
; ORGANISM: Rat  
US-09-188-930-147  
Query Match 42.6%; Score 582; DB 4; Length 105;  
Best Local Similarity 93.3%; Pred. No. 2.1e-51;  
Matches 98; Conservative 2; Mismatches 5; Indels 0; Gaps 0;  
QY 1 MLNRQLYVWLLALFLFPFCCLCQDEYMESPTGGLPPDCSCCHGDYSGRGVGGPPGPG 60  
DB 1 MLNRQLYVWLLALFLFPFCCLCQDEYMESPTGGLPPDCSCCHGDYSGRGVGGPPGPG 60  
QY 61 PPGFNGHNGNNGATGHEGAKGKDGKDLGPRGERGQHGPKG 105,  
DB 61 PPGFNGHNGNNGATGHEGAKGKDGKDLGPRGERGQHGPKG 105  
RESULT 2  
US-09-188-930-280  
; Sequence 280, Application US/09188930A  
; Patent No. 6150502  
; GENERAL INFORMATION:  
; APPLICANT: Watson, James D.  
; APPLICANT: Strachan, Lorna  
; APPLICANT: Sleeman, Matthew  
; APPLICANT: Onrust, Rene  
; APPLICANT: Murison, James Greg  
; TITLE OF INVENTION: Compositions Isolated From Skin Cells  
; FILE REFERENCE: 11000.1011c1  
; CURRENT APPLICATION NUMBER: US/09/188,930A

; CURRENT FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 348  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 280  
; LENGTH: 105  
; TYPE: PRT  
; ORGANISM: Rat  
US-09-188-930-280

Query Match 42.6%; Score 582; DB 4; Length 105;  
Best Local Similarity 93.3%; Pred. No. 2.1e-51;  
Matches 98; Conservative 2; Mismatches 5; Indels 0; Gaps 0;  
Qy 1 MLRQLIYQALLLFFLPCQDEYMSPTQGLPPDCSKCHGDSFRGYQGPPGPPG 60  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 1 MLRQLVYVHLLALLFLPCQDEYMSPTQAGGLPPDCSKCHGDSFRGYQGPPG 60  
Qy 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGRGQHPKG 105  
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGRGQHPKG 105

## RESULT 3

US-09-188-930-294

; Sequence 294; Application US/09188930A

; Patent No. 6150502

; GENERAL INFORMATION:

; APPLICANT: Watson, James D.

; APPLICANT: Strachan, Lorna

; APPLICANT: Sleeman, Matthew

; APPLICANT: Onrust, Rene

; APPLICANT: Murlison, James Greg

; TITLE OF INVENTION: Compositions Isolated From Skin Cells

; TITLE OF INVENTION: and Methods For Their Use

; FILE REFERENCE: 11000.1011c1

; CURRENT APPLICATION NUMBER: US/09/188.930A

; CURRENT FILING DATE: 1998-11-09

; NUMBER OF SEQ ID NOS: 348

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 294

; LENGTH: 294

; TYPE: PRT

; ORGANISM: Rat

US-09-188-930-294

Query Match 23.1%; Score 316; DB 4; Length 294;  
Best Local Similarity 28.9%; Pred. No. 5.7e-24;  
Matches 86; Conservative 41; Mismatches 89; Indels 82; Gaps 12;

Qy 6 LIYQALLLFFLPCQDEYMSPTQGLPPDCSKCHGDSFRGYQGPPGPP 59  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 10 MISWLLAC-ALP---CAADPMLGAFARRDFQKGGPQLVCS-----LPGQGP 54  
Qy 60 GPPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGRGQHPKG 114  
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 55 GPPAPSGSGMYGMRGPPGKDGQDQDGRDSEEGPPTGNKGGKAGACATRA 114  
Qy 93 GPRGER-----GQHPKRGKGYGPIP-----PELQIATFASLATHFSNQS 133  
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 115 GPRGPKGVSGTPGKHGTPGKGGKGGKGLPGPCSGSGSRAKSAFSAVTKSPERL 174  
Qy 134 GIIFSSVETNIGNFDVMTGFRGAPVSGVYFFTFSM---KHEDVEEYVYLMHNGNTVF 190  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 175 PIKFDKILMNEGGHYNASSGKGFVSGVPIYFTYDITLANKH-----LAIGLVHNGQ--Y 227  
Qy 191 SMYSYEMK-GKSDTSSNHAVLKLAKGDEWLMR---GNGALHGDHQRFSFAGFLF 243  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 228 RIRFDANTGNHDVAGSTILALKEGDEVWLQIFYSRONGLFYDPYWTDSLFTGLIY 285

## RESULT 4

US-08-463-911-2

; Sequence 2; Application US/08463911

; Patent No. 5869330  
; GENERAL INFORMATION:  
; APPLICANT: Scherer, Philipp E.  
; APPLICANT: Lodish, Harvey F.  
; TITLE OF INVENTION: A NOVEL SERUM PROTEIN PRODUCED  
; TITLE OF INVENTION: EXCLUSIVELY IN ADIPOCYTES  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Millitia Drive  
; CITY: Lexington  
; STATE: Massachusetts  
; COUNTRY: USA  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/463,911  
; FILING DATE:  
; CLASSIFICATION: 530  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: WHI95-05  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 861-6240  
; TELEFAX: (617) 861-9540  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 247 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-463-911-2

Query Match 21.5%; Score 294; DB 2; Length 247;  
Best Local Similarity 31.5%; Pred. No. 7.4e-22;  
Matches 81; Conservative 40; Mismatches 102; Indels 34; Gaps 9;

Qy 6 LIYQALLLFFLPCQDEYMSPTQGLPPDCSKCHGDSFRGYQGPPGPPG 63  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 2 LLQALLLFLILP-SHAEDDVTTTELAPALVPPPKTCA-----GWMA-----GIPG 48  
Qy 64 IPGNHNGNNGATGHEGAKGKDGKDLGPRGER---GQHPKRGKGYGPIPPE----- 115  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 49 HPCHNGTTPGRDGRDTPGKGEKGDAGLLGPKGETGDMGTGAEGRGFPCTPKRGKEPG 108  
Qy 116 -----LOIATFASLATHFSNONGIIFSSVETNIGNFDVMTGFRGAPVSGVYFFTFSM 170  
|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 109 EAYMYKASVSGLETRVTPVNPVIRFTKIFYNOONHYDGTGKFCYCNIPGLYFSYHIT 168  
Qy 171 KHEDVEEYVYLMHNGNTVFSMYSENKSGKSSHAVLKLAKGDEWLMR-GNG---A 226  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 169 VY--MKDVKVSFLFKKAVLFTYDQYQEKVNDQASGVSLLHLEVGDDQVQLVYGDGHDNG 226  
Qy 227 LHGDHQRFSFAGFLF 243  
|||:|||||:|||||:|||||:|||||:|||||:|||||  
Db 227 LYADNVNDSTFTGFLY 243

## RESULT 5

US-09-530-423-2

; Sequence 2; Application US/09530423

; Patent No. 6461821

; GENERAL INFORMATION:

; APPLICANT: Otsuka Pharmaceutical Co., Ltd.

; TITLE OF INVENTION: Smooth muscle growth inhibitory composition, a

; TITLE OF INVENTION: diagnostic method for arteriosclerosis and a kit

; TITLE OF INVENTION: therefor

; FILE REFERENCE: P98-51

Example 5; SEQ ID NO 3219; 10078pp; English.

The invention relates to human nucleic acids (AA157798-RA161369) and the encoded polypeptides (AA38642-RA42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders.

Note: The sequence data for this patent did not form part of the printed specification.

SO Sequence 126 AA;

Query Match 48.5%; Score 663; DB 22; Length 126;  
Best Local Similarity 100.0%; Pred. No. 1.8e-56;  
Matches 126; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 121 MASLATHFSNQSGIFSSVETNIGNFFDVTMGREGAPVSGVYFFTFSMKHHDEVEYV 180

Db 1 MASLATHFSNQSGIFSSVETNIGNFFDVTMGREGAPVSGVYFFTFSMKHHDEVEYV 60

Qy 181 YLMHNGNTVFSMYSEMGKSDTSSNHAVLKLAKDEWLRMGNGALHGDHQRFTFAGF 240

Db 61 YLMHNGNTVFSMYSEMGKSDTSSNHAVLKLAKDEWLRMGNGALHGDHQRFTFAGF 120

Qy 241 LLFETK 246

Db 121 LLFETK 126

RESULT 13

AA175969

ID AAY75969 standard; Protein; 105 AA.

XX AC AAY75969;

XX DT 27-MAR-2000 (first entry)

XX DE Rat skin cell protein, SEQ ID 147.

XX KW Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast;

XX KW embryonic skin cell; keratinocyte stem cell; transit amplifying cell;

XX KW secreted; transmembrane; inflammation; cancer; neurological disease;

XX KW angiogenesis; tumour vascularisation; growth disorder;

XX KW developmental disorder; skin wound; hair follicle disorder;

XX KW anti-inflammatory; cytostatic; neuroprotective; vulnery.

XX OS Rattus sp.

XX PN WO9955865-A1.

XX XX 04-NOV-1999.

XX PD 29-APR-1999; 99WO-NZ00051.

XX PF 29-APR-1998; 98US-0069726.

XX PR 09-NOV-1998; 98US-0188930.

XX XX (GENE-) GENESIS RES & DEV CORP LTD.

XX PA Strachan L, Sleeman M, Watson JD, Onrust R, Kumble A, Murison JG;

XX PI WPI: 2000-072177/06.

XX DR Novel polynucleotides useful for the treatment of various conditions

XX PT

including wounds and cancer -

Claim 4; Page 112-113; 235pp; English.

The invention relates to novel nucleic acid sequences derived from rat dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocyte stem cells and transit amplifying cells. Polypeptides of the invention may be used to treat inflammation, cancer and neurological diseases. The proteins may be used to stimulate the growth and motility of keratinocytes, to inhibit the growth of cancer cells, to modulate angiogenesis and tumour vascularisation, to modulate skin inflammation, to modulate epithelial cell growth and to inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences AAY75942-Y76123 represent polypeptides encoded by cDNA sequences derived from several mouse, rat or human skin cell types. Sequences AAY75942-Y75947, AAY76020-Y76021, AAY76094-Y76104 and AAY76119 are proteins with an N-terminal signal sequence, indicating that they are secreted. Sequences AAY75986-Y75989, AAY76061-Y76071, AAY76106-Y76109 and AAY76121-Y76122 are proteins with one or more putative transmembrane domains.

SO Sequence 105 AA;

Query Match 42.6%; Score 582; DB 21; Length 105;

Best Local Similarity 93.3%; Pred. No. 1e-48;

Matches 98; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MLWQLIYWQLLALFFLPFCQDEYMESPTGGLPPDCSCCHGDYSFRGYQGGPPG 60

Db 1 MLRQLVWHLALLFLPFCQDEYMESPTGGLPPDCSCCHGDYFRGYQGGPPG 60

Qy 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGQHGPKG 105

Db 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGQHGPKG 105

RESULT 14

AA176025

ID AAY76025 standard; Protein; 105 AA.

XX AC AAY76025;

XX DT 27-MAR-2000 (first entry)

XX DE Rat skin cell protein, SEQ ID NO:280.

XX KW Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast;

XX KW embryonic skin cell; keratinocyte stem cell; transit amplifying cell;

XX KW secreted; transmembrane; inflammation; cancer; neurological disease;

XX KW angiogenesis; tumour vascularisation; growth disorder;

XX KW developmental disorder; skin wound; hair follicle disorder;

XX KW anti-inflammatory; cytostatic; neuroprotective; vulnery.

XX OS Rattus sp.

XX PN WO9955865-A1.

XX XX 04-NOV-1999.

XX PD 29-APR-1999; 99WO-NZ00051.

XX PF 29-APR-1998; 98US-0069726.

XX PR 09-NOV-1998; 98US-0188930.

XX XX (GENE-) GENESIS RES & DEV CORP LTD.

XX PA Strachan L, Sleeman M, Watson JD, Onrust R, Kumble A, Murison JG;

XX PI WPI: 2000-072177/06.

XX DR Novel polynucleotides useful for the treatment of various conditions

XX PT

PT including wounds and cancer -

PS Claim 4; Page 168; 235pp; English.

XX The invention relates to novel nucleic acid sequences derived from rat  
CC dermal papilla, human keratinocytes and neonatal foreskin fibroblasts,  
CC and mouse embryonic skin, keratinocyte stem cells and transit amplifying  
CC cells. Polypeptides of the invention may be used to treat inflammation,  
CC cancer and neurological diseases. The proteins may be used to stimulate  
CC the growth and motility of keratinocytes, to inhibit the growth of  
CC cancer cells, to modulate angiogenesis and tumour vascularisation, to  
CC modulate skin inflammation, to modulate epithelial cell growth and to  
CC inhibit binding of HIV-1 to leukocytes. The invention may also be used  
CC to treat growth and developmental defects, skin wounds and hair follicle  
CC disorders. Sequences AAY75942-Y76123 represent polypeptides encoded  
CC by cDNA sequences derived from several mouse, rat or human skin cell  
CC types. Sequences AAY75942-Y75947, AAY76020-Y76021, AAY76094-Y76104 and  
CC AAY76119 are proteins with an N-terminal signal sequence, indicating  
CC that they are secreted. Sequences AAY75986-Y75989, AAY76061-Y76071,  
CC AAY76106-Y76109 and AAY76121-Y76122 are proteins with one or more  
CC putative transmembrane domains.

XX Sequence 105 AA;

Query Match 42.6%; Score 582; DB 21; Length 105;  
Best Local Similarity 93.3%; Pred. No. 1e-48;  
Matches 98; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

QY 1 MLWRQLIYWQLLALFFLPFCLODEYVESPTGGLPDCSKCHGDSYFRGYGPPGPG 60  
DB 1 MLRRQLVWHLALLFPFCLODEYVESPTGGLPDCSKCHGDSYFRGYGPPGPG 60  
|||:::|||||  
QY 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105  
DB 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105  
|||  
DB 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105

RESULT 15

AAB55908

ID AAB55908 standard; Protein; 105 AA.

XX AAB55908;

AC AAB55908;

DT 08-MAR-2001 (first entry)

XX Skin cell protein, SEQ ID NO: 147.

DE Rat; skin cell; cytostatic; antiinflammatory; anti-HIV;

KW keratinocyte growth stimulation; cancer; angiogenesis inhibition;

KW inflammation; neurological disease.

XX Rattus sp.

OS Rattus sp.

XX WO2000069884-A2.

PN WO2000069884-A2.

XX 23-NOV-2000.

PD 15-MAY-2000; 2000WO-NZ00075.

PF 14-MAY-1999; 99US-0312283.

XX (GENE-) GENESIS RES & DEV CORP LTD.

PA Watson JD, Strachan L, Onrust R, Sleeman M, Kumble KD, Murison JG;

XX WPI: 2001-007495/01.

DR N-PSDB; AAC99566, AAC99776.

XX New isolated polynucleotide used in the identification of genetic

PT disorders and encoding polypeptides used for treating inflammatory

PT disease, cancer and neurological diseases -

XX

PS Claim 4; Page 147; 352pp; English.

XX The present sequence is a polypeptide which is expressed in  
CC mammalian skin cells. The polypeptide is useful for stimulating  
CC keratinocyte growth and motility, inhibiting the growth of cancer cells,  
CC modulating angiogenesis, inhibiting angiogenesis and vascularisation of  
CC tumours, modulating skin inflammation, stimulating the growth of  
CC epithelial cells, inhibiting the binding of human immunodeficiency virus  
CC (HIV)-1 to leukocytes, and treating inflammatory disease, cancer and  
CC neurological diseases. The polynucleotide can be used as a marker, in  
CC the identification of genetic disorders, and for the design of  
CC oligonucleotides for examining expression patterns.

XX Sequence 105 AA;

Query Match 42.6%; Score 582; DB 22; Length 105;  
Best Local Similarity 93.3%; Pred. No. 1e-48;  
Matches 98; Conservative 2; Mismatches 5; Indels 0; Gaps 0;

QY 1 MLWRQLIYWQLLALFFLPFCLODEYVESPTGGLPDCSKCHGDSYFRGYGPPGPG 60  
DB 1 MLRRQLVWHLALLFPFCLODEYVESPTGGLPDCSKCHGDSYFRGYGPPGPG 60  
|||:::|||||  
QY 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105  
DB 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105  
|||  
DB 61 PPGIPGNHNGNNGATGHEGAKGKDGKDLGPRGERGOGHPKG 105

Search completed: January 13, 2003, 10:42:49

Job time : 38 secs